S.N.: 09/870,277
Art Unit: 3691

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

Listing of Claims:

1. (Cancelled).

2. A computer-implemented method, comprising:

calculating a subscriber's account balance in a telecommunications system where at least two different types of vouchers having with the same type of a credit value are usable to make deposits in a subscriber's account, at least some of the vouchers being purchasable, the types of the vouchers differing from each other at least to an extent that a certain amount of calling time has different prices in different types of the vouchers, where calculating comprises,

defining, to a memory, at least two different ways of updating the account balance for the same type of a credit value, wherein a first way to update comprises calculating, by a processor coupled to the memory, the account balance by adding a credit value of a new voucher to the credit value in the account, and wherein a second way to update comprises calculating the account balance by setting the account balance to be the credit value of the new voucher;

maintaining information in a database separate from account balance information, said information indicating the type of a last used voucher of the subscriber;

receiving a deposit identifying a new voucher which the subscriber is to use to update the subscriber's credit;

determining, by the processor, the type of the new voucher;

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determining, by the processor, the type of the last used voucher of the subscriber;

comparing, by the processor, the type of the new voucher with the type of the last used voucher of the subscriber; and

responsive to said vouchers being of the same type, using the processor to update the account balance in accordance with the first way; and

otherwise, when said vouchers are of a different type but have the same type of credit value, using the processor to update the account balance in accordance with the second way.

3.   A computer-implemented method, comprising:

calculating a subscriber's account balance in a telecommunications system where at least two different types of vouchers having the same type of a credit value are usable to make deposits in a subscriber's account, at least some of the vouchers being purchasable, the types of the vouchers differing from each other at least to an extent that a certain amount of calling time has different prices in different types of the vouchers; where calculating comprises,

defining, to a memory, at least two different ways of updating the account balance for the same type of a credit value, wherein the first way to update comprises calculating, by a processor coupled to the memory, the account balance by adding a value of a new voucher to the credit value in the account, and wherein a second way to update comprises determining a factor, other than one, multiplying the credit value in the account with the factor, adding the result of said multiplication to the credit value of the new voucher, and setting the account balance to be the result of said addition;

maintaining information in a database separate from account balance information, said information indicating the type of a last used voucher of the subscriber;

receiving a deposit identifying a new voucher which the subscriber is to use to update the subscriber's credit;

determining, by the processor, the type of the new voucher;

determining, by the processor, the type of the last used voucher of the subscriber;

comparing, by the processor, the type of the new voucher with the type of the last used voucher of the subscriber; and

if said vouchers are of the same type, using the processor to update the account balance in accordance with the first way; and

if said vouchers are of a different type, but have the same type of credit value, using the processor to update the account balance in accordance with the second way.

4. The method of claim 3, wherein said factor is determined by the processor on the basis of the type of the last used voucher and the type of the new voucher.

5. The method of claim 3 further comprising: asking the subscriber for permission to update the account balance, if the vouchers are of a different type having the same type of a credit value; and
updating, by the processor, the account balance only if the permission is received from the sub scriber.

6. The method of claim 3 wherein the types of the vouchers are determined on the basis of a voucher identification number.

7. The method of claim 2, wherein the telecommunications system is a mobile telecommunications system.

8. A telecommunications system in which a subscriber can pre-pay for subscriber's calls by making deposits in a subscriber's account using at least two different types of vouchers having the same type of a credit value, wherein at least some of the vouchers are purchasable, the types of the vouchers differing from each other at least to an extent that a certain amount of calling time has different prices in different types of the vouchers, the telecommunications system comprising:

a database configured to contain voucher-specific information and subscriber-specific information; and

a network element connectable to the database and comprising a memory, a processor, and an interface for user interaction, the network element being configured to:

obtain, from the database, and in response to the subscriber making a deposit, voucher-specific information and the subscriber's subscriber-specific information;

determine, by using the obtained information, a type of a last used voucher of the subscriber and the type of a new voucher which the subscriber is going to use to update the subscriber's account balance;

compare the type of the last used voucher with the type of the new voucher;

apply a first method stored in the memory and executed by the processor to update the account balance in a first way if the last used voucher and the new voucher are the same type, wherein the first way comprises calculating the account balance by adding a credit value of a new voucher to the credit in the account;

detect a change of voucher if the last used voucher and the new voucher are of different type of vouchers having the same type of credit value; and

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in response to said detection, update the account balance in a second way different from the first way, wherein the second way comprises calculating the account balance by setting the account balance to be the credit value of the new voucher.

9.   The telecommunications system of claim 8, wherein the network element is further configured, in response to said detection, to ask the subscriber for permission to update the account balance and to update the account balance only in response to the permission.

10. (Cancelled).

11. The telecommunications system of claim 9, wherein the network element is an Intelligent Peripheral of an Intelligent Network, said Intelligent Peripheral comprising an Interactive Voice Response service through which the account balances are updated.

12. A network element for a telecommunications system where a subscriber of the system can pre-pay for subscriber's calls by making deposits in a subscriber's account using at least two different types of vouchers having the same type of a credit value, where at least some of the vouchers are purchasable, the types of the vouchers differing from each other at least to an extent that a certain amount of calling time has different prices in different types of the vouchers, the network element comprising:

a memory in which the account balance, and information indicating, subscriber-specifically, a type of a voucher last used by the subscriber are maintained, said information relating to the type of voucher last used being maintained separate from the account balance;

a processor coupled to the memory and configured to:

determine the type of a voucher last used by the subscriber;

determine the type of the new voucher which the subscriber is going to use to update the subscriber's account balance;

compare the type of the voucher last used by the subscriber with the type of the new voucher, and

calculate the account balance by adding a credit value of a new voucher to the credit in the account if said vouchers are of the same type, and

calculate the account balance by setting the account balance to be the credit value of the new voucher if said vouchers are of a different type of vouchers having the same type of a credit value.

13. The network element of claim 12, further comprising an
interface for user interaction coupled to the processor, wherein the processor is further configured to ask the subscriber, via the interface, for permission to update the account balance in response to said vouchers being of a different type, and to update the account balance only in response to permission received from the subscriber.

14. A network element for a telecommunications system where a subscriber of the system can pre-pay for subscriber's calls by making deposits in a subscriber's account using at least two different types of vouchers having the same type of a credit value, where at least some of the vouchers are purchasable, the types of the vouchers differing from each other at least to an extent that a certain amount of calling time has different prices in different types of the vouchers, the network element comprising:

access to a memory, where the account balance and information indicating subscriber-specifically a type of a voucher last used by the subscriber are maintained, said information relating to the type of voucher last used being maintained separate from the account balance;

a processor coupled to the memory and configured to:

determine the type of the voucher last used by the subscriber;

determine the type of a new voucher which the subscriber is going to use to update the subscriber's account balance;

compare the type of the voucher last used by the subscriber with the type of the new voucher; calculate the account balance by adding a credit value of a new voucher to the account balance in the account if said vouchers are of the same type; and

calculate the account balance by determining a factor, other than one, by multiplying the subscriber's current account balance with said factor, by adding the result of said multiplication to the credit value of the second voucher, and by setting the account balance to be the result of said addition if said vouchers are of a different type of vouchers having the same type of a credit value.

Claims 15-16: (Cancelled).

17.   The network element of claim 14, wherein the network
element further comprises an interface via which the processor is further configured to ask the subscriber for permission to update the account balance in response to said vouchers being of a different type, and the processor is configured to update the account balance only in response to permission received from the subscriber.

Claims 18-19: (Cancelled).

20.   A telecommunications system in which a subscriber pre-
pays for subscriber's calls by making deposits in a subscriber's account using at least two different types of vouchers having the same type of a credit value and where at least some of the vouchers are purchasable, the types of the vouchers differing from each other at least to an extent that a

certain amount of calling time has different prices in different types of the vouchers, the telecommunications system comprising:

a database configured to contain voucher-specific information and subscriber-specific information; and

a network element coupled to the database and comprising a memory, a processor, and an interface for user interaction, the network element being configured to:

obtain, in response to the subscriber making a deposit, from the database, voucher-specific information and the subscriber's subscriber-specific information;

determine, by using the obtained information, a type of a last used voucher of the subscriber and the type of a new voucher which the subscriber is going to use to update the subscriber's account balance;

compare the type of the lased used voucher with the type of the new voucher;

apply a first method to update the account balance if the last used voucher and the new voucher are of the same type, the first method comprising calculating the account balance by adding a credit value of a new voucher to the credit value in the account;

detect a change of voucher if the last used voucher and the new voucher are of different type of vouchers having the same type of a credit value; and

in response to said detection, to apply a second method to update the account balance, the second method comprising determining a factor, other than one, multiplying the credit in the account with the factor, adding the result of said multiplication to the credit value of the new voucher, and setting the account balance to be the result of said addition.

21. The network element of claim 12, wherein the network element is an Intelligent Peripheral of an Intelligent Network, said Intelligent Peripheral comprising an Interactive Voice Response service through which the account balances are updated.

22. The network element of claim 13, comprising an Intelligent Peripheral of an Intelligent Network, said Intelligent Peripheral comprising an Interactive Voice Response service through which the account balances are updated.